

REMARKS

Reconsideration of the application in light of the amendments and the following remarks is respectfully requested.

Status of the Claims

Claims 1-20 are pending.

Claims 1, 3, 18, and 19 have been amended. New claim 20 has been added.

Information disclosure statement

An Information disclosure statement is submitted herewith for the Examiner's consideration.

Objections to the Specification

The Examiner has indicated that paragraph 0021 of the Specification is incomplete. Applicants have amended the Specification and submit that paragraph 0021 is now in compliance with U.S. patent law. Applicants respectfully request withdrawal of the objection.

Rejection under 35 U.S.C. §101

Claims 1-19 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner contends that the claims are not limited to a practical application of a mathematical algorithm because the recited interpolation of data does not provide a useful, concrete, and tangible result.

Applicants have now amended independent claims 1, 18 and 19 to remove the recitation to "interpolation." It is respectfully submitted that representation and/or compression of data, as recited in claims 1, 18 and 19, is a useful, concrete, and tangible result. By providing efficient representation or compression of data, transmission and processing speeds can be increased, for example in the field of image processing. *See*, Specification, paragraphs 0002-0004. Applicants

submit that the method recited in claims 1-19, as amended, provide a useful, concrete and tangible result, *i.e.*, representation and/or compression of data.

In view of the above remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-19 under 35 U.S.C. §101.

Rejection under 35 U.S.C. §112

Claims 1-19 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner contends that lines 3-4 of claim 1 “incorrectly imply that the selected two-dimensional interpolation function is based on or a function of the sampling function, *i.e.* different sampling functions would result in different two-dimensional interpolation functions.” (Detailed Action, Item 2, page 2.) Applicants respectfully disagree.

Applicants respectfully submit that it is certainly possible to have different two-dimensional interpolation functions $s(z)$ based on different sampling functions $a(z)$. For example, the Specification describes, in paragraph 0018, a set of properties that the various sampling functions $a(z)$ will have: “[s]uitable for $a(z)$ are numerous functions having zeros at least at the sampling points.” (Specification, paragraph 0018.) The Specification also describes that “[s]uitable functions for use as a function $s(z)$ are especially those having zeros at least over the set of sampling points z_j , except at point $z=0$.” (Specification, paragraph 0015.) As described by the equation in paragraph 0017 of the Specification, $s(z)$ can be expressed as a function of $a(z)$.

Accordingly, Applicants submit that different sampling functions $a(z)$ will result in different two-dimensional interpolation functions $s(z)$. Therefore, the claim language of claim 1 is accurate.

The Examiner also contends that that the feature of “a Cauchy integral theorem being applicable for the interpolation function” is unclear. (Detailed Action, Item 2, page 3.) Applicants have amended claims 1, 18, and 19 to recite that the interpolation function $s(z)$ is based on a sampling function $a(z)$, “wherein a Cauchy integral theorem is applicable for the interpolation function $s(z)$.” Applicants submit that it is clear from the claim language that the identified interpolation function $s(z)$ satisfies the conditions required for applying a Cauchy integral theorem, as described in the Specification in paragraphs 0013-0014.

In view of the above remarks, Applicants respectfully request reconsideration and withdrawal of the rejection to claims 1-19 under 35 U.S.C. §112, second paragraph.

New Claim

New claim 20 depends from claim 1, and recites features in addition to those set forth in claim 1. Support for new claim 20 may be found, for example, in the Specification in paragraphs 0026, 0032-0036 and Figures 3 and 4. It is respectfully submitted that no new matter has been added. Applicants submit that new claim 20 is patentable over the cited references.

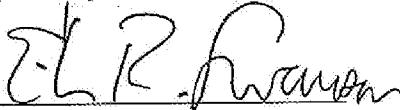
CONCLUSION

Each and every point raised in the Office Action mailed December 22, 2006 has been addressed on the basis of the above remarks. In view of the foregoing it is believed that claims 1-20 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

By 

Erik R. Swanson
Registration No.: 40,833
DARBY & DARBY P.C.
P.O. Box 5257
New York, New York 10150-5257
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant